WHAT IS CLAIMED IS:

1. A continuous process for the preparation of ethyl lactate (I) by esterification of lactic acid [or of a lactic acid composition] using ethanol according to the reaction (1):

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$$CH_{3}CH(OH)CO_{2}H + CH_{3}CH_{2}OH \equiv CH_{3}CH(OH)CO_{2}CH_{2}CH_{3} + H_{2}O$$
 (1)

- which consists in reacting said lactic acid with ethanol according to an ethanol/lactic acid molar ratio at least equal to 2.5, in the presence of a catalyst, at a temperature ranging from 50°C to 90°C and preferably ranging from 80°C to 90°C, at atmospheric pressure; said process being characterized in that:
 - a mixture comprising ethyl lactate, unconverted lactic acid, ethanol, water and small amounts of heavy products is continuously extracted, at atmospheric pressure, from the reaction medium at a degree of conversion of the lactic acid at most equal to 80%; then in that
 - this mixture is subjected to a flash separation at a temperature of between 80°C and 90°C and under a pressure of less than or equal to 65 mbar, and in that,
 - on the one hand, the top stream, comprising ethyl lactate, ethanol and water, is subjected to a continuous fractional distillation, at atmospheric pressure, said stream being introduced onto a specific plate of a distillation column;
 - on the other hand, the bottom stream, composed essentially of unconverted lactic acid and of heavy products, is continuously recycled to the esterification reaction medium; and in that,
- 35 a mixture of ethanol and of water is recovered as top product from the fractional distillation and an ethyl lactate having a water content which makes possible

its subsequent purification is recovered as bottom product from the fractional distillation.

- 2. The process as claimed in claim 1, characterized in that use is made of an ethanol/lactic acid molar ratio ranging from 2.5 to 4.5.
 - 3. The process as claimed in either of claims 1 and 2, characterized in that the mixture is extracted continuously from the reaction medium when the degree of conversion of the lactic acid is between 65% and 75%.

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- 4. The process as claimed in any one of claims 1 to 3, characterized in that the top stream exiting from the flash separation feeds a fractional distillation column at a point situated in the bottom part of said column.
 - 5. The process as claimed in any one of claims 1 to 4, characterized in that the fractional distillation of the top stream resulting from the flash separation is carried out at a column bottom temperature ranging from 152°C to 165°C.
- 6. The ethyl lactate obtained as claimed in any one of claims 1 to 5, characterized in that it has a water content at most equal to 0.3%.